

TECHNICAL MANUAL

OPERATOR'S MANUAL

**MULTIPLE INTEGRATED LASER
ENGAGEMENT SYSTEM
(MILES 2000)**

**TACTICAL ENGAGEMENT SIMULATION SYSTEM
(TESS)**

FOR

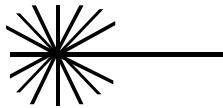
M2/M3 BRADLEY FIGHTING VEHICLE

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LASER WARNING

Suitable precautions must be taken to avoid possible damage to the eye from overexposure to radiated laser energy. Precautionary measures include the following:

- **NEVER fire the laser** at personnel within 10 meters.
- **NEVER look at the laser transmitter** through magnifying optics such as binoculars, telescopes, or periscopes at ranges less than 40 meters.

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Page No.	*Change No.	Page No.	*Change No.
Title.....	1		
A-B.....	1		
a - b	1		
i - v	1		
vi Blank.....	1		
1-1 - 1-18.....	1		
2-1 - 2-60.....	1		
3-1 - 3-10.....	1		
A-1	1		

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*Zero in this column indicates an original page

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TABLE OF CONTENTS

	<u>PAGE</u>	
CHAPTER 1	HOW TO USE THIS MANUAL.....	B
SECTION I.	INTRODUCTION	1-1
	GENERAL INFORMATION	1-1
1.1	Scope.....	1-1
1.2	Maintenance Forms and Records.....	1-1
1.3	Reporting Equipment Improvement Recommendations (EIRs)	1-1
1.4	Corrosion Prevention and Control	1-1
1.5	Preparation for Storage or Shipment.....	1-2
1.6	List of Abbreviations and Glossary	1-2
1.7	Safety, Care, and Handling	1-5
SECTION II.	EQUIPMENT DESCRIPTION AND DATA.....	1-6
1.8	Equipment Characteristics, Capabilities, and Features	1-6
1.8.1	Equipment Characteristics	1-6
1.8.2	Capabilities and Features.....	1-6
1.9	Location and Description of Major Components.....	1-6
1.10	Equipment Data	1-8
SECTION III.	THEORY OF OPERATION.....	1-9
1.11	Basic Principles of Operation	1-9
1.11.1	Principles of Operation (MILES 2000).....	1-9
1.11.2	Principles of Operation	1-9
1.11.2.1	Main Gun Firing	1-9
1.11.2.2	IWS System	1-9
1.11.2.3	Detector Belt System	1-9
1.11.2.4	Kill Status Indicator (KSI)	1-9
1.11.2.5	Direct/Indirect Fire Cue (DIFCUE)	1-9
1.11.2.6	Coax Microphone	1-11
1.11.2.7	Universal Laser Transmitter (ULT)	1-11
1.11.2.8	TOW System.....	1-11
1.11.2.9	Control Unit (CU).....	1-11
1.11.2.10	Power Controller.....	1-11
1.11.2.11	Optical Turret Positioning Device (OTPD)	1-11
CHAPTER 2	OPERATING INSTRUCTIONS.....	2-1
SECTION I.	DESCRIPTION AND USE OF OPERATOR'S CONTROLS AND INDICATORS	2-1
2.1	Equipment Figures and Tables	2-1
SECTION II.	PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS).....	2-11
2.2	Introduction to PMCS Table.....	2-11
SECTION III.	OPERATION UNDER USUAL CONDITIONS	2-14
2.3	Assembly and Preparation for Use	2-14
2.3.1	Individual Weapons System (IWS)	2-14
2.3.1.1	Helmet Harness.....	2-14
2.3.1.1.1	Helmet Harness Installation for CVC Helmet	2-14
2.3.1.1.2	Torso Harness	2-15

TABLE OF CONTENTS-Continued

	<u>PAGE</u>	
2.3.2	Installation of MILES 2000 on M2/M3	2-17
2.3.2.1	Detector Belt Fastener Tape	2-17
2.3.2.1.1	Applying Fastener Tape for Detector Belts	2-17
2.3.2.1.2	Fastener Tape Preparation	2-21
2.3.2.1.3	Fastener Tape (Right/Front).....	2-22
2.3.2.1.4	Fastener Tape (Left/Rear).....	2-22
2.3.2.2	Detector Belts	2-22
2.3.2.3	Kill Status Indicator (KSI)	2-23
2.3.2.4	DIFCUE Installation	2-25
2.3.2.5	Coax Microphone Assembly.....	2-25
2.3.2.6	Universal Laser Transmitter (ULT)	2-26
2.3.2.7	TOW Simulator Tube Assembly	2-26
2.3.2.8	System Cable (Exterior Connection)	2-27
2.3.2.9	Control Unit	2-30
2.3.2.10	Power Controller.....	2-31
2.3.2.11	M2/M3 Shorting Plug Installation	2-31
2.3.2.12	System Cable (Interior ONLY).....	2-35
2.3.2.12.1	M2/M3 VIC ONLY System Cable	2-35
2.3.2.12.2	M2/M3 VIS ONLY System Cable.....	2-36
2.3.2.13	Optical Turret Positioning Device (OTPD)	2-47
2.4	Initial Adjustments, Before Use, Daily Checks, and Self-Test Requirements.....	2-48
2.5	Operating Procedures.....	2-48
2.5.1	M2/M3 Control Mode on Operating Procedures	2-48
2.5.2	MILES 2000 M2/M3 Boresight Procedures	2-53
2.5.3	Console Display at Night or Limited Visibility	2-55
2.5.4	MILES 2000 M2/M3 Loading Procedures	2-55
SECTION IV.	OPERATION UNDER UNUSUAL CONDITIONS	2-57
2.6	Assembly and Preparation for Use under Unusual Conditions.....	2-57
2.6.1	Unusual Environment/Weather.....	2-57
2.6.2	Fording and Swimming.....	2-57
2.6.3	Emergency Procedures	2-57
SECTION V.	FUNCTIONAL CHECKS	2-58
2.7	Functional Test Procedures.....	2-58
2.7.1	Built-In-Test (BIT)	2-58
CHAPTER 3	OPERATOR MAINTENANCE INSTRUCTIONS	3-1
SECTION I.	TROUBLESHOOTING.....	3-1
3.1	Troubleshooting Procedures	3-1
SECTION II.	OPERATOR MAINTENANCE	3-5
3.2	Operator Maintenance Procedures	3-5
3.2.1	Remove/Replace Procedures for Individual Weapons System (IWS).....	3-5
3.2.1.1.	CVC Helmet Harness Assembly Removal	3-5
3.2.1.2	CVC Helmet Harness Assembly Replacement.....	3-5

TABLE OF CONTENTS-Continued

	<u>PAGE</u>
3.2.1.3 Torso Harness Assembly Removal	3-5
3.2.1.4 Torso Harness Assembly Replacement	3-6
3.2.2 Remove/Replace Procedures for M2/M3.....	3-6
3.2.2.1 Right Front Detector Belt Removal	3-6
3.2.2.2 Right Front Detector Belt Replacement.....	3-6
3.2.2.3 Left Rear Detector Belt Removal	3-6
3.2.2.4 Left Rear Detector Belt Replacement.....	3-7
3.2.2.5 Kill Status Indicator (KSI) Removal.....	3-7
3.2.2.6 Kill Status Indicator (KSI) Replacement	3-7
3.2.2.7 DIFCUE Removal.....	3-7
3.2.2.8 DIFCUE Replacement	3-7
3.2.2.9 Coax Microphone Removal	3-7
3.2.2.10 Coax Microphone Replacement.....	3-7
3.2.2.11 Universal Laser Transmitter (ULT) Removal.....	3-8
3.2.2.12 Universal Laser Transmitter (ULT) Replacement	3-8
3.2.2.13 TOW Simulator Tube Removal	3-8
3.2.2.14 TOW Simulator Tube Replacement.....	3-8
3.2.2.15 Control Unit (CU) Removal.....	3-8
3.2.2.16 Control Unit (CU) Replacement	3-8
3.2.2.17 Power Controller Removal	3-9
3.2.2.18 Power Controller Replacement.....	3-9
3.2.2.19 Shorting Plug Removal	3-9
3.2.2.20 Shorting Plug Replacement	3-9
3.2.2.21 System Cable Removal	3-9
3.2.2.22 System Cable Replacement	3-9
3.2.2.23 Optical Turret Positioning Device (OTPD) Removal.....	3-10
3.2.2.24 Optical Turret Positioning Device (OTPD) Replacement	3-10
3.3 MILES 2000 Equipment Disassembly Procedures.....	3-10
3.3.2 Disassembly Procedures for M2/M3.	3-10

LIST OF FIGURES

	<u>PAGE</u>
1-1 M2/M3 Bradley Fighting Vehicle	1-12
1-2 M2/M3 Combat Vehicle System Transit Case	1-16
1-3 M2/M3 CVS System Components (Items not to Scale)	1-17
2-1 Individual Weapons System (IWS) (PN 147421)	2-2
2-2 Individual Weapons System (IWS) (PN 148245)	2-3
2-3 Detector Belts	2-4
2-4 Kill Status Indicator (KSI) Assembly	2-5
2-5 Universal Laser Transmitter (ULT).....	2-6
2-6 Control Unit (CU).....	2-7
2-7 Power Controller.....	2-8
2-8 Optical Turret Positioning Device (OTPD).....	2-9
2-9 TOW Simulator Tube	2-10
2-10 Helmet Harness (CVC Helmet).....	2-14
2-11 Torso Harness.....	2-15
2-12 Torso Harness Installation	2-16
2-13 M2/M3 Bradley Fighting Vehicle	2-18
2-14 M2/M3 Detector Belt Positioning	2-19
2-15 M2/M3 Rear View.....	2-20
2-16 M2/M3 Detector Belt Location	2-20
2-17 M2/M3 Front View Detector Belt Location	2-21
2-18 M2/M3 Area of Vehicle to be Cleaned Prior to Adding Fastener Tape	2-21
2-19 Fastener Tape Preparation	2-22
2-20 M2/M3 Left/Rear Detector Belt Location	2-23
2-21 M2/M3 Right/Front Detector Belt Location	2-24
2-22 M2/M3 KSI Mounted to the Integrated Sight Unit (ISU)	2-24
2-23 M2/M3 Coax Microphone	2-26
2-24 M2/M3 ULT and Adapter Assembly.....	2-26
2-25 M2/M3 ULT/Adapter Mounted on Main Gun.....	2-26
2-26 M2/M3 TOW Simulator Tube.....	2-28
2-27 M2/M3 TOW Tube Loading.	2-28
2-28 M2/M3 System Cable.....	2-29
2-29 M2/M3 System Cable (Exterior Connections).	2-30
2-30 M2/M3 Control Unit.....	2-31
2-31 M2/M3 Power Controller	2-32
2-32 M2/M3 Shorting Plug Installation	2-32
2-33 M2/M3 Feeder Handle Latch	2-33
2-34 M2/M3 Main Gun Receiver Feeder Handle	2-33
2-35 M2/M3 Main Gun Receiver 2W10 Locking Cap	2-34
2-36 M2/M3 Main Gun Receiver 2W10 with Shorting Plug Connected.....	2-34
2-37 M2/M3 System Cable.....	2-37
2-38 M2/M3 Combined VIC System Cable, Connections to AM-1780.....	2-38
2-39 M2/M3 Turret Diagnostic Test Panel Access.....	2-38
2-40 M2/M3 Turret Diagnostic Test Panel	2-39

LIST OF FIGURES-Continued

PAGE

2-41	M2/M3 P10 to J4 Connection	2-40
2-42	M2/M3 MILES 2000 Cover Plate Secured	2-40
2-43	M2/M3 Power Controller	2-41
2-44	M2/M3 Control Unit Connection	2-41
2-45	M2/M3 VIS System Cable.	2-42
2-46	M2/M3 Combined VIS System Cable Connection to MCS.....	2-43
2-47	M2/M3 Turret Diagnostic Test Panel Access.	2-44
2-48	M2/M3 Turret Diagnostic Test Panel.....	2-45
2-49	M2/M3 P10 to J4 Connection.	2-46
2-50	M2/M3 OTPD Installation.	2-47
2-51	M2/M3 Horizontal Hit/Kill Zone.....	2-54

LIST OF TABLES

PAGE

1-1	List of Abbreviations.....	1-2
1-2	Glossary.....	1-3
1-3	Equipment Data.....	1-8
1-4	Kill Indication Chart.....	1-10
1-5	Kit/Equipment List.....	1-13
2-1	Controls and Indicators Reference	2-1
2-2	Operator Preventive Maintenance Checks and Services	2-12
2-3	CVS Control Mode “ON”	2-50
2-4	Vehicle System Built-In-Test.....	2-61
2-5	ATWESS Built-In-Test	2-62
2-6	IWS Built-In-Test (BIT).....	2-62
3-1	MILES 2000 Troubleshooting Chart for M2/M3 Configuration.....	3-2

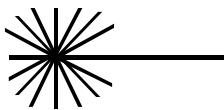
APPENDICES

A-1	Troubleshooting.....	A-1
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Suitable precautions must be taken to avoid possible damage to the eye from overexposure to radiated laser energy. Precautionary measures include the following:

- **NEVER fire the laser** at personnel within 10 meters.
- **NEVER look at the laser transmitter** through magnifying optics such as binoculars, telescopes, or periscopes at ranges less than 40 meters.

WARNING

- Personnel can be killed or injured by turret movement. Never install or remove MILES 2000 equipment in/on an M1A1/A2 Abrams and M2/M3 Bradley unless **TURRET TRAVERSE LOCK** is **LOCKED** and the **VEHICLE MASTER POWER** switch is **OFF**.
- Tape primer is toxic and highly flammable. Do not spray near heat, open flame, or sparks. Use primer only in well ventilated areas. Do not permit smoking in the area. Injury to personnel may result.
- MILES equipment transit cases have a multiple personnel lifting requirement. Failure to use sufficient personnel could result in injury during installation or removal.

To prevent personal injury, turn all system power off on the CU before conducting any removal/replacement procedures.

CAUTION

- Ensure battery door is securely closed during storage and operations, or damage can occur to the battery door.
- Do not spill fuel on detector belts or fastener tape. Fuel dissolves the adhesive properties of the tape primer and may cause a detector belt to fall from the vehicle, causing damage or loss of a detector belt.
- Blank fire can heat up the barrel and damage the cable if the cable touches the barrel.
- Use local safe/proper handling procedures when removing undetonated ATWESS cartridges. Notify Explosive Ordnance Disposal (EOD) for a pick up as required.
- TOW cartridges may expel fragments/debris. Maintain prescribed actual weapon danger/caution zones when using the TOW.

For information on **FIRST AID**, refer to **FM 21-11**.

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HOW TO USE THIS MANUAL

INTRODUCTION.

This manual contains operation instructions for the Multiple Integrated Laser Engagement System (MILES 2000), Tactical Engagement Simulation System (TESS), when configured with the M2/M3 Bradley Fighting Vehicle.

MANUAL DESCRIPTION.

This manual is divided into three chapters. Chapters are further divided into sections. The chapter descriptions are provided in the following subparagraphs.

Chapter 1 is an introduction that provides general information, equipment description and theory of operation. It also contains a list of abbreviations and a glossary of terms.

Chapter 2 provides operating instructions for the MILES 2000 equipment.

Chapter 3 describes how to troubleshoot and maintain the equipment. MILES 2000 equipment does not need operator maintenance or lubrication, except for external cleaning after use.